

### **REMARKS**

The present amendment is submitted in response to the Office Action mailed December 12, 2007. Claims 1-10 are currently pending in the application. No new matter or issues are believed to be introduced by this amendment. In view of the amendments above and the remarks to follow reconsideration and allowance of this application are respectfully requested.

#### ***Claim Objections***

In the Office Action, Claims 6 and 7 were objected to under 37 CFR 1.75 (c) as being in improper form because a multiple dependent claim 5. In response, claims 5 and 6 have been appropriately amended to depend from claim 4. Accordingly, withdrawal of the objection to the claims is respectfully requested.

#### ***Double Patenting Rejection***

In the Office Action, Claims 1 – 6 were rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 8 of U.S. Patent No. 20050163023 (hereinafter the ‘023 patent) respectively in view of U.S. Patent Application No. 2005/016023 to Miyamoto et al. – hereinafter Miyamoto.

The Examiner asserts regarding claim 1 that the only difference between the two claims in the table provided and claim 1 is that claim 2 of the ‘023 patent specifies about the thickness of the transparent spacer layer in detail. The Examiner further asserts that

other than that, both sides of the table show an optical data storage medium with dual layers and a transparent layer in between.

The Examiner states at page 2 of the Office Action, in the ***Response to Arguments***, that Applicant's argument against the non-statutory double patenting rejection is not based on the cited claims in the cited reference 023. The Examiner states that the applicant instead refers to the specification of the 023 reference

In the instant Office Action, the Examiner has reaffirmed the double patenting rejection, noting that the claims in the current application are notably similar to the claims in the 023' reference with little to no difference. Applicants respectfully disagree for at least the following reasons.

First, Applicants respectfully point out that in the Applicant's previous response Applicant's arguments were clearly made with reference to the cited claims of the 023 reference. Applicants respectfully invite the Examiner to revisit the previous response in which Applicants clearly cite **claim 1 of the 023' reference**, at pages 5 – 6.

Applicants presently submit three newly cited claim distinctions between the **claims** of the '023 reference and the **claims** of the current application in addition to those arguments made in the previous Office Action with regard to claim 1 of the '023 reference.

## **I. First Claim Distinction**

As a first additional claim distinction between the **claims** of the current

application and the **claims** of the '023 reference, Applicants respectfully point out that claim 1 of the '023 reference teaches *a transparent spacer layer (3) between the first and the second recording stack having a thickness larger than the depth of focus of the focused radiation beam characterized in that a first optically transparent thermal barrier layer (b 1) is interposed between the first recording stack and the first plastic/resinous layer.*

Applicants respectfully submit that the claims of the current application are silent with respect to *a transparent layer having a thickness larger than the depth of focus of the focused radiation beam, characterized by a first optically transparent thermal barrier layer (b1) interposed between the first recording stack and the first plastic/resinous layer*, as recited in claim 1 of the '023 application.

## **II. Second Claim Distinction**

As a further claim distinction between the **claims** of the current application and the **claims** of the '023 reference, Applicants respectfully point out that claim 8 of the '023 reference teaches *a second optically transparent thermal barrier layer (b2), interposed between the third recording stack and the second plastic/resinous layer.*

Applicants respectfully submit that the claims of the current application are silent with respect to *a second optically transparent thermal barrier layer (b2), interposed between the third recording stack and the second plastic/resinous layer*, as recited in claim 8 of the '023 application.

### **III. Third Claim Distinction**

As a further claim distinction between the **claims** of the current application and the **claims** of the '023 reference, Applicants respectfully point out that claims 8 and 9 of the current application teach an effective reflection level of the stacks being at least 0.18 at a radiation beam wavelength of approximately 655 nm (See claim 8) and wherein the effective reflection level of the stacks is at least 0.04 at a radiation beam wavelength of approximately 405 nm.

Applicants respectfully submit that the claims of the '023 reference are silent with respect to effective reflection levels.

Accordingly, for at least the reasons cited above, it is respectfully requested that the rejection on the grounds of non-statutory obviousness-type double patenting of Claim 1 be withdrawn, and independent claim 1 be allowed.

Claims 2-6 depend from independent Claim 1 and therefore contain the limitations of Claim 1 and are believed to be in condition for allowance for at least the same reasons given for Claim 1 above. Accordingly, withdrawal of the rejections of claims 2-6 and allowance of Claims 2-6 is respectfully requested.

### ***35 U.S.C. §103(a)***

In the Office Action, Claims 1-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application 2001/0016242 A1 to Miyamoto et al –

hereinafter Miyamoto, in view of U.S. Patent 5,726,970 to Kaneko et al. – hereinafter Kaneko.

It is respectfully submitted that Claims 1 – 3 are patentable over the cited references, alone and in combination, for at least the following reasons.

Regarding claim 1, Miyamoto is cited for teaching most of the elements of claim 1. However, the Examiner admits that Miyamoto fails to teach a dual stack storage medium characterized in that the first information layer is one selected from the group of types consisting of a read only layer and a write once layer, and that the second information layer is one selected from the group of types consisting of a read only layer, a write once layer and a rewritable layer. The Examiner cites Kaneko for remedying this deficiency in Miyamoto. Specifically, Kaneko is cited for allegedly teaching a read-only-memory (ROM) type information storage layer having a high light-transmittance provided on a transparent substrate and a re-writable information storage layer provided on the ROM layer through a spacer layer.

Applicants respectfully submit that Kaneko only teaches a first information layer being a read only layer (i.e., ROM type information storage) but does not teach or suggest a first information layer being a write once layer. This is true because at the time of the invention, it was not technically possible to construct a first information layer as a write once layer because it was not possible to make highly transparent layer sufficient to serve as a first layer of a dual stack optical data storage medium. It was also believed at the time that the mirror layer had to be very thick. The inventors have overcome these obstacles by using a dye layer together with a

mirror layer having sufficient reflection and at the same time a very high transmission.

Paragraph 28 of the specification recites in part, a semi transparent reflective layer of Au ( $n=0.28$ ;  $k=3.9$ ) having a thickness of 8 nm is present between the first information layer 3 and the spacer layer 4 and deposited by e.g. sputtering.

Accordingly, applicant respectfully request withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claim 1 and allowance thereof is respectfully requested.

Additionally, Claims 2-3 depend from independent Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 2-3 are believed to be allowable over Miyamoto and Kaneko, alone and in combination.

***35 U.S.C. §103(a)***

In the Office Action, Claims 4 and 5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyamoto in view of U.S. Patent No. 6,067,312 to Matz et al. (hereinafter Matz).

Claims 4 and 5 depend from Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 4 and 5 are believed to be allowable over Miyamoto in view of Matz.

**35 U.S.C. §103(a)**

In the Office Action, Claims 8 – 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyamoto and further in view of U.S. Patent Application No. 2004/0043254A1 to Wisnudel.

Claims 8 – 10 depend from Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 8 – 10 are believed to be allowable over Miyamoto in view of Wisnudel.

It is further submitted that Miyamoto in view of Wisnudel does not teach or suggest the elements of claims 8 – 10. Wisnudel is an inappropriate reference because it is directed to a single stack optical data storage medium (i.e., a single data layer disposed between said substrate and said reflective layer) in contrast to the dual stack optical storage data medium of the invention. It is well known that the **reflection level** of a single stack optical disk is different from the **effective reflection level** of a dual stack optical disk, emphasis on **effective**. Unlike a single stack optical storage data medium, in a dual stack optical storage medium, a beam has to pass through the first layer twice. Therefore, an effective reflection level specified for the second layer of a dual stack optical storage medium comprises both the intrinsic reflection level for the second layer in addition to taking into account passing through the first layer twice.

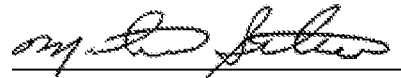
Accordingly, applicant respectfully request withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claims 8 – 10 and allowance thereof is respectfully requested.

### **Conclusion**

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-10 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



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